The opinion in support of the decision being entered today is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MASAHIKO NAKAYAMA

Appeal 2007-3837
Application 10/631,897[1]
Technology Center 2100

Decided: September 26, 2007

Before JAMESON LEE, SALLY C. MEDLEY, and JAMES T. MOORE, *Administrative Patent Judges.*

MEDLEY, *Administrative Patent Judge.*

DECISION ON APPEAL

A. Statement of the Case

Applicant's appeal under 35 U.S.C. § 134 from a final rejection of claim 5. We have jurisdiction under 35 U.S.C. § 6(b).

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

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1 Application for patent filed 1 August 2003. The real party in interest is NEC Corporation (Br. 2).

Christopher US 4,731,851 Mar. 15, 1988

Claim 5 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Christopher (Final Rejection 2 and Answer 3).

BACKGROUND

The invention is related to a circuit that adjusts the decibel level of an input signal. The circuit includes a plurality of parallel signal lines that are shifted a number of bits (FIG. 5 items 221-226). A control circuit (FIG. 5, item 250), set for the desired decibel level, controls one or more switches (FIG. 5, items 231-233). The switches are controlled by the control circuit to select among the outputs of the signal lines (Specification 18:7-11). If an output is not needed, a default "0" is generated (FIG. 5, item 234, Specification 19:5-10). Adder circuits (FIG. 5 235-237) add the outputs from the switches to get the desired decibel level output signal (FIG. 5 item 143).

B. Issue

The issue is whether Applicants have shown that the Examiner erred in determining claim 5 to be unpatentable over Christopher.

C. Findings of fact ("FF")

The record supports the following findings of fact as well as any other findings of fact set forth in this opinion by at least a preponderance of the evidence.

1. Applicant's sole pending claim 5 is the subject of this appeal.

2. The Examiner finally rejected claim 5 as being anticipated by Christopher.

3. Claim 5 is as follows:

5. A decibel level adjustment device for calculating an output signal which is a d decibel multiple of an input signal, comprising:

a plurality of signal lines arranged parallel to each other for producing in advance signals that are shifted a number of bits necessary for operating on said input signal;

at least one switch means for selecting outputs of said plurality of signal lines or all "0";

a switch control circuit means for receiving the value of said d as a decibel control value and, in accordance with said decibel control value, switching said switch or switches; and

an adder circuit means for adding together the outputs of said switch or switches and output of said signal lines that does not pass by way of said switch or switches.

Christopher

4. The Examiner found that Christopher describes in Fig. 6, a decibel adjustment device including a plurality of signal lines (503, 504, 506, 508) that are shifted a number of bits (Christopher, col. 9, ll. 12-14), at least one switch means (510, 512, 514), a switch control circuit means (518, C0C1) and an adder circuit means (516) (Final Rejection 2 and Answer 3).

5. Christopher describes that the weighting circuits 504, 506 and 508 "may be simple hard-wired bit shift arrangements." (Christopher, col. 9, ll. 12-14).

Applicant's arguments

6. Applicant argues that claim 5 requires that each of the plurality of signal lines is individually shifted a number of bits, and that Christopher's weighting circuits 504, 506, and 508 do not act on the input signal 500 but on signal 503 (Br. 9).

7. Applicant also argues that there is no switch in Christopher with the function recited in claim 5 for selecting outputs of said plurality of signal lines or all "0" (Br. 10).

Examiner's response

8. The Examiner responded and further found that Christopher describes that the output of the weighting circuits 504, 506 and 508, which are hardwired bit shift arrangements, operate on the input signal as claimed (Answer 4).

9. The Examiner further found that gating elements 510, 512, and 514 (FIG. 6) meet the switching means limitation since the outputs of the gating elements provide either signals in the parallel lines (when enabled) or otherwise zero (when disabled) to the adder 502 in response to control signals (Answer 5).

D. Principles of Law

35 U.S.C. § 102

"A person shall be entitled to a patent unless....the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States" 35 U.S.C. § 102(b).

To anticipate a claim, a prior art reference must disclose every limitation of the claimed invention, either expressly or inherently. *Verdegaal Bros. Inc. v. Union Oil Co.*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

The Board must give a claim its broadest reasonable construction. *In re Bigio*, 381 F.3d 1320, 1324, 72 USPQ2d 1209, 1210-11 (Fed. Cir. 2004). *KCJ Corp. v. Kinetic Concepts, Inc.*, 223 F.3d 1351, 1356, 55 USPQ2d 1835, 1839 (Fed. Cir. 2000).

E. Analysis

The Examiner finally rejected claim 5 as being anticipated under 35 U.S.C. § 102(b) by Christopher. The Examiner made the requisite findings, applying Christopher to the claim, and explained how each limitation is met by Christopher.

Applicant argues that Christopher fails to describe "a plurality of signal lines arranged parallel to each other for producing in advance signals that are shifted a number of bits necessary for operating on said input signal" as recited in claim 5.

Applicant has not demonstrated error in the Examiner's finding that Christopher describes a plurality of signal lines arranged in parallel as seen in Fig. 6, e.g., the lines going into weighting circuits 504, 506 and 508. Applicant also has not demonstrated error in the Examiner's finding that weighting circuits 504, 506 and 508 function to shift their respective inputs a number of bits.

Rather, Applicant argues that Christopher's weighting circuits 504, 506, and 508 do not act on the input signal 500 but on signal 503 which has already been shifted by barrel shifter 501 (FF 6). We understand Applicant to argue that claim 5 requires that the plurality of parallel signal lines be connected directly to the input signal without any intervening circuitry. We disagree that claim 5 is so limiting.

Claim 5 uses the construction "comprising" in the preamble. This construction permits the inclusion of more than the recited elements. Moreover, claim 5 does not require that the input signal be directly connected to the plurality of parallel signal lines. Claim 5 recites "a plurality of signal lines arranged parallel to each other for producing in advance signals that are shifted a number of bits necessary for operating on said input signal." Claim 5 recites that the signal lines produce signals that are shifted a number of bits necessary for operating on the input signal. The claim is broad enough to include an intervening circuit element between the input signal and the parallel signal lines. Ultimately, both circuits could function to shift bits necessary for operating on the input signal, as the Examiner found with

respect to Christopher (FFs 4, 5 and 8). For these reasons, Applicant's argument is not persuasive.

Applicant next argues that Christopher's switch means does not function to select outputs of the plurality of signal lines or an all "0" as recited per claim 5. Specifically, Applicant argues:

> In Christopher, control signals CO and C1 are input into gate 518. Gate 518 controls gating circuit 510, while control signal C1 controls gating circuits 512 and 514. These gating circuits pass the signals from dividers 504, 506, and 508 to summing circuit 516 depending on the control signals C0 and C1. However, there is no switch in Christopher with the function recited in claim 5 for selecting outputs of said plurality of signal lines or all "0". (Br. 10).

Applicant's argument is conclusory and not meaningful. Merely rehashing what the reference does show and concluding that it does not meet a particular limitation is not helpful to the trier of fact and certainly does not rise to the level of showing error in the Examiner's findings. Does the Applicant contend that none of the gates function to select outputs from the plurality of signal lines, and if so, why not? Or does Applicant contend that Christopher does not function to select from an "all 0" and if so, why not? Or does Applicant contend that Christopher does not function to do both - that none of the gates function to select outputs from the plurality of signal lines and select from an "all 0", and if so, why not?

The Examiner explicitly found that gating elements 510, 512, and 514 (FIG. 6) meet the switching means functional limitation since the outputs of

the gating elements provide either signals in the parallel lines (when enabled) or otherwise zero (when disabled) to the adder 502 in response to control signals CO and C1 (FFs 4 and 9). Applicant's argument is insufficient to demonstrate error in the Examiner's specific findings.

For all of these reasons, the Examiner's rejection of claim 5 is sustained.

E. Decision

Upon consideration of the record, and for the reasons given, the Examiner's rejection is affirmed.

The Examiner's rejection of claims 5 under 35 U.S.C. § 102(b) as being anticipated by Christopher is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv) 2006.

AFFIRMED

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